ATTACHMENT II

CHAPTER 3.2.3.

BOVINE TUBERCULOSIS

Preamble: For diagnostic tests, reference should be made to the *Manual*.

Article 3.2.3.1.

For the purposes of this *Code*:

***Country* or *part of the territory of a country officially free* from bovine tuberculosis**

To qualify as officially free from bovine tuberculosis, a country or part of the territory of a country shall satisfy the following requirements:

1) bovine tuberculosis is compulsorily notifiable in the country;

2) 99.8% of the herds in the considered geographical area have been officially free from bovine tuberculosis for at least the past three years as disclosed by periodic testing of all cattle in the area to determine the absence of bovine tuberculosis (periodic testing of all cattle is not required in an area where a surveillance programme as described in paragraph 4) below, reveals that at least 99.9% of the cattle have been in officially tuberculosis-free herds for at least six years);

3) cattle introduced into a country or part of the territory of a country officially free from bovine tuberculosis must be accompanied by a certificate from an *Official Veterinarian* attesting their compliance with Article 3.2.3.9. or the criteria set out in this Article;

4) a country or part of the territory of a country officially free from bovine tuberculosis must have a *Veterinary Administration* which should be able to trace and test the herd of origin of any reactor to a tuberculin test disclosed after removal from the considered territory. Also animals which at a *post-mortem* examination carried out by a veterinarian in an *abattoir* or elsewhere disclosed gross pathological lesions of tuberculosis which where necessary can be confirmed by established methods of microscopical-biological or cultural examination. In addition, such a country or part of the territory of a country officially free from bovine tuberculosis must have in place a surveillance programme to ensure the discovery of bovine tuberculosis should the disease be present in the country or part of the territory of a country, through slaughter monitoring and/or tuberculin testing.

***Herd officially free* from bovine tuberculosis**

To qualify as officially free from bovine tuberculosis, a herd of cattle shall satisfy the following requirements:

1) the herd is in a country or part of the territory of a country officially free from bovine tuberculosis; or

2) all cattle in the herd:

   a) show no clinical sign of bovine tuberculosis;

   b) over six weeks of age, have shown a negative result to at least two official tuberculin tests carried out at an interval of six months, the first test being at six months following the eradication of bovine tuberculosis from the herd;

   c) showed a negative result to an annual tuberculin test to ensure the continuing absence of bovine tuberculosis;

3) cattle introduced into the herd:

a) have been certified by an Official Veterinarian as having shown a negative result to the tuberculin test during the 30 days prior to entry into the herd; and/or

b) were kept in a herd officially free from bovine tuberculosis.

Article 3.2.3.2.

Veterinary Administrations of *importing countries* should require:

for cattle for breeding or rearing

the presentation of an *international animal health certificate* attesting that the animals:

1) showed no clinical sign of bovine tuberculosis on the day of shipment;

2) were isolated for the three months prior to shipment and showed a negative result to the test for bovine tuberculosis on two occasions, with an interval of not less than 60 days between each test; or

3) showed a negative result to the tuberculin test for bovine tuberculosis during the 30 days prior to shipment and come from a *herd officially free* from bovine tuberculosis; or

4) showed a negative result to the tuberculin test for bovine tuberculosis during the 30 days prior to shipment and come from a *country* or *part of the territory of a country officially free* from bovine tuberculosis.

Article 3.2.3.3.

Veterinary Administrations of *importing countries* should require:

for cattle for slaughter

the presentation of an *international animal health certificate* attesting that the animals satisfy the requirements provided in Article 3.2.3.2.; or

the presentation of an international animal health certificate attesting that the animals:

1) were subjected to a tuberculin test for bovine tuberculosis with negative results during the 30 days prior to shipment;

2) were kept in a *herd officially free* from bovine tuberculosis; or

3) were kept in a *country* or *part of the territory of a country officially free* from bovine tuberculosis.

This certificate may be complemented in paragraphs 2) and 3) by:

4) are not being eliminated as part of an eradication programme against bovine tuberculosis.

Article 3.2.3.4.

Veterinary Administrations of *importing countries* should require:

for wild bovines destined for zoological gardens

the presentation of an *international animal health certificate* attesting that the animals were subjected to a tuberculin test for bovine tuberculosis with negative results during the 30 days prior to shipment.

Article 3.2.3.5.

Veterinary Administrations of *importing countries* should require:

for pigs for breeding or rearing

the presentation of an *international animal health certificate* attesting that the animals:

1) showed no clinical sign of bovine tuberculosis on the day of shipment; and/or

2) were subjected to a tuberculin test for bovine tuberculosis with negative results; the test being performed on the posterior aspect of the base of the ear (the result should be read after 48 hours); and/or

3) were kept in a country, part of the territory of a country or herd officially free from bovine tuberculosis.

Article 3.2.3.6.

Veterinary Administrations of *importing countries* should require:

for pigs for slaughter

the presentation of an *international animal health certificate* attesting that the animals satisfy the requirements provided in Article 3.2.3.5.; or

the presentation of an international animal health certificate attesting that the animals:

1) were kept in a *country, part of the territory of a country* or *herd officially free* from bovine tuberculosis;

2) are not being eliminated as part of an eradication programme against bovine tuberculosis.

Article 3.2.3.7.

Veterinary Administrations of *importing countries* should require:

for *semen*

the presentation of an *international animal health certificate* attesting that:

1) the donor animals:

   a) showed no clinical sign of bovine tuberculosis on the day of collection;

   b) were isolated in the *establishment* of origin during the three months prior to collection and were subjected to a tuberculin test for bovine tuberculosis with negative results on two occasions, with an interval of not less than 60 days between each test; or

   c) were kept in the *exporting country* for the 30 days prior to collection, in an establishment or *AI centre* where all animals are officially free from bovine tuberculosis;

2) the semen was collected, processed and stored strictly in accordance with Appendices 4.2.1.1. and 4.2.1.2. as relevant.

Article 3.2.3.8.
(under study)

Veterinary Administrations of *importing countries* should require:

for *embryos*/ova

the presentation of an *international animal health certificate* attesting that the donor females:

1) and all other animals in the herd of origin showed no clinical sign of bovine tuberculosis during the 24 hours prior to departure to the *collection unit*;

2) were kept in a *herd officially free* from bovine tuberculosis;

3) were isolated in the *establishment* of origin for the 30 days prior to departure to the collection unit and were subjected to a tuberculin test for bovine tuberculosis with negative results.

Article 3.2.3.9.

Veterinary Administrations of *importing countries* should require:

for *fresh meat* of cattle and pigs

the presentation of an *international sanitary certificate* attesting that the entire consignment of meat comes from animals which were subjected to *ante* and *post-mortem* veterinary inspection and were found to be free from bovine tuberculosis.

ATTACHMENT III

Australia's Cattle Industry Achieves TB Freedom

Australia's declaration of freedom from bovine tuberculosis (TB) on 31 December 1997 will place the nation at the forefront in the international eradication of this major cattle disease. A sustained commitment to TB eradication by the cattle industry, State and Territory governments and the Commonwealth Government has made this significant national achievement possible.

Efforts to control the disease in Australia began more than 100 years ago. At first the main focus was on preventing people contracting TB from the milk supply. Then, from the 1960s, the beef and dairy industries faced the threat of losing vital export markets because of the continuing presence of TB and another disease, brucellosis, in Australian cattle.

The national response was the initiation in 1970 of the Brucellosis and Tuberculosis Eradication Campaign (BTEC), aimed at eradicating both diseases across Australia. BTEC allowed for the existing programs to be expanded and better coordination between the states and territories.

Effective eradication strategies were developed for all types of cattle enterprise—from small dairy farms in high-rainfall areas to the vast, sparsely stocked cattle runs of remote, arid regions. The large feral buffalo population in the Northern Territory, with high levels of TB in some areas, had to be included in the campaign because TB can pass between cattle and buffalo.

Freedom from brucellosis was declared in 1989; subsequent monitoring has confirmed that it no longer exists in Australia. Then, on 31 December 1992, national 'impending freedom' from bovine TB was declared.

At that stage, no infection was known to remain but further testing was needed to confirm that some herds were clear of TB. It was recognised that further cases would be detected in a small number of herds that had reached 'confirmed free' status, because available tests had a low sensitivity, and TB has the ability to remain dormant for long periods.

The definition of TB freedom applied in Australia includes a requirement that impending freedom was attained not less than 5 years previously. As a result, 31 December 1997 is the earliest possible date for the new declaration. Other requirements are that: the number of discoveries of TB in confirmed free herds since impending freedom has been acceptable; these 'breakdowns' have been handled effectively; and all TB is believed to have been eradicated. Approved systems for monitoring for the disease must be in place.

These provisions, which have all been met, are stricter than those employed by the world veterinary health organisation, the Office International des Épizooties (OIE), to define freedom from bovine TB; Australia reached the OIE standard some time ago. Key features of the OIE definition are requirements that 99.8% of herds have been officially TB-free for at least 3 years and an effective surveillance program is operating.

Nevertheless, it is recognised that a small number of tuberculous cattle or buffalo may remain undetected in Australia. Consequently, surveillance for TB through meat inspection at abattoirs will continue for at least another 5 years. A national program begun in 1992 to ensure that lesions that could be TB are detected in abattoirs and subjected to definitive laboratory diagnosis will remain in operation. Cattle identification systems that allow any infection discovered to be traced back to the originating herd will be maintained. In addition, a program of testing to monitor herds considered the most likely sources of any future TB detections will continue.

Australia's beef and dairy industries

In terms of value of production, beef is Australia's third largest agricultural industry—after wheat and wool—and the dairy industry is the fourth largest. The national cattle herd numbered 26.2 million in 1995, of which about 2.8 million were dairy cattle. Queensland has the largest number of cattle (10.2 million in 1995), followed by New South Wales (6.4 million), Victoria (4.3 million), Western Australia (1.8 million), the Northern Territory (1.5 million), South Australia (1.3 million) and Tasmania (700,000).

Both beef and dairy products are major contributors to export income. Statistics for 1994–95 show beef as the nation's third most important export commodity after coal and gold; exports were worth $2.85 billion, about 72% of the gross value of production ($3.96 billion). The dairy industry's gross value of production was $2.57 billion, with exports accounting for about half of returns.

Before BTEC

Bovine TB probably entered Australia with the first cattle importations, and was eventually found in herds in all regions. It reached its highest prevalence in many dairying districts and in arid regions where large numbers of cattle spend long periods congregated around watering points. Prolonged close contact encouraged spread of the disease.

Scientific demonstration in the 1870s that people could contract and die from TB transmitted in milk prompted Australia's first bovine TB control measures in the 1880s. Inspection of dairies began, with the aim of ensuring that milk was not supplied from cows seen to be infected.

Use of the newly developed tuberculin test to detect tuberculous cattle began on a small scale in Australia in the 1890s. Over the following decades, implementation of State and Territory control programs in dairying areas greatly reduced rates of TB transmission to humans. The general adoption of pasteurisation from the 1940s finally ensured the safety of milk.

Development of an improved tuberculin test made possible a big expansion in control programs after World War II, and by the start of the national campaign in 1970, TB prevalence was very low in all dairying regions and in beef herds in more closely settled areas. In Tasmania, the disease was close to eradication. However, few efforts had been made to tackle TB in the extensive pastoral lands of inland and northern Australia, the most difficult areas for disease control.

Key elements of the State and Territory programs carried over into the national campaign included: the use of systematic field testing and meat inspection to detect TB; quarantining and repeated testing of infected herds; and slaughter of all cattle found to have TB and payment of compensation to their owners.

The national campaign

BTEC was launched on 1 January 1970, with new funding provided to step up the eradication effort. A sub-committee of the Animal Health Committee—the Chief Veterinary Officers from each jurisdiction—took on the coordinating task, maintaining technical and financial supervision of the campaign. Responsibility for

Bovine tuberculosis

Bovine tuberculosis (TB) is caused by infection with the organism *Mycobacterium bovis*. This is closely related to *M. tuberculosis*, the main cause of TB in humans, and to *M. avium*, which affects many bird species. *M. bovis* produces disease in man, pigs and occasionally other animals, as well as cattle and buffalo. However, in Australia only cattle and buffalo have been shown to cause spread of TB to other species.

Cattle become infected by inhaling or ingesting organisms shed by tuberculous animals. Disease development begins with the formation of a characteristic primary lesion. Infection can then spread to the nearest lymph node, to other nodes and eventually to the bloodstream, resulting in wide dissemination. Symptoms of advanced TB include a chronic cough and progressive emaciation.

The rate of progression of the disease varies greatly. In some cases it can be very rapid. In others, TB can remain dormant for a decade or more before spreading through the animal; such cases accounted for many of the TB detections in the final years of BTEC.

operations remained with the State and Territory governments; Commonwealth roles included national budget management and TB detection at abattoirs by meat inspection.

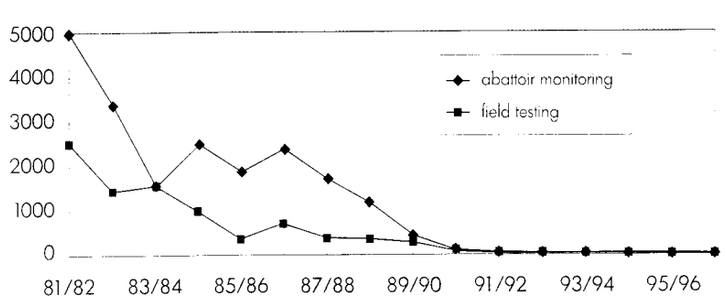
Starting in 1973, the cattle industry made major contributions to campaign funding through levies — initially on beef and veal exports, then on slaughterings and live exports and, from 1991, on cattle transactions.

The industry also became increasingly involved in the running of the campaign as it progressed. A number of State advisory committees with industry representation were set up in the 1970s, and a national industry–government liaison committee was established in 1980. In 1984, a new body—the BTEC Committee—took over responsibility for national management of the campaign; its members came from the cattle industry and all governments. New State and Territory committees established in 1988 gave the industry a further voice in campaign decision-making.

Tasmania was declared TB-free in 1975, and the disease has not been detected there since. The dates when provisional freedom (TB prevalence less than 0.1%) and impending freedom were achieved in different parts of the Australian mainland mark the progress of the campaign across the continent.

New South Wales, Victoria, Western Australia south of the Kimberley and southern South Australia became provisionally free in 1975. Most of the southern half of Queensland followed in 1979. Extensions to the provisionally free area in 1985 and 1986 took in the remainder of South Australia and southern Queensland, and the Northern Territory south of Alice Springs. North Queensland became provisionally free in 1988, as did a large region in the centre of the Northern Territory and much of the Kimberley in Western Australia. Three further northward extensions lifted the remainder of the Northern Territory to provisionally free status between 1989 and 1991. Finally, in March 1992, the West Kimberley became the last area to achieve provisional freedom.

Declarations of impending freedom were concentrated in a much shorter period—1988 to 1992. New South Wales, the Australian Capital Territory, Victoria, South Australia and the region of the Northern Territory south of Alice Springs became impending free on 1 January 1988, and Queensland followed on 1 January 1990. In the Northern Territory, the impending free area extended northward in five steps between March 1989 and the date of national impending freedom, 31 December 1992. All of Western Australia was declared impending free on that day.



Major progress during the 1980s saw the number of tuberculous cattle detected each year by abattoir monitoring and field testing fall to low levels by 1990. Australia's cattle population was about 25.2 million in 1981, fell to 21.8 million in 1986, and had risen again to more than 26 million by 1995.

As expected, TB has been detected in a small number of cattle and buffalo herds—about 30 from a national total of some 150,000—since 31 December 1992. Most cases came to light through meat inspection; the others were detected during monitoring tests on previously infected herds. The majority of these incidents involved just one animal, and occurred in northern Australian herds that had been exposed to infection in the relatively recent past. On each occasion a major program was implemented, aimed at ensuring that no tuberculosis remained in either the affected herd or any that had exchanged cattle with it (see Box 'Dealing with TB detections').

Dealing with TB detections

'Breakdowns'—detections of TB in herds of confirmed free or equivalent status—have been, and will continue to be, dealt with according to strict criteria laid down in the Standard Definitions and Rules.

An Approved Property Program aimed at returning the herd to confirmed free status within two years must be implemented. This program, which requires approval by the Chief Veterinary Officer of the jurisdiction and careful supervision, involves destocking, test and slaughter, or a combination of the two. Additional approval at a national level is required in cases where the destocking approach is not adopted.

As well as ensuring that TB no longer exists in the affected herd, veterinary authorities undertake a thorough tracing program to locate other herds that may have been the source of the infection or to which infection could have been spread. All suspect herds are quarantined and tested.

With the declaration of TB freedom, BTEC formally ends. A new Tuberculosis Freedom Assurance Program (TFAP) assumes the surveillance and other functions needed to safeguard the cattle industry's TB-free status. Australian Animal Health Council Ltd, established in January 1996 as Australia's peak animal health body, will be responsible for TFAP, which will be administered by a committee representing the cattle industry and the State, Territory and Commonwealth governments.

Campaign operations

Systematic field testing and abattoir monitoring were used to locate infected herds. Government veterinarians and contracted private practitioners performed the field tests. Abattoir monitoring involved detection of lesions by meat inspectors, and laboratory confirmation of TB. The requirements for cattle to be fitted with tail-tags identifying their herd of origin allowed efficient 'traceback' from abattoirs.

After TB was detected in a herd, eradication usually required many rounds of testing of all cattle, and slaughter of those animals testing positive. The herd was taken to be clear when it had progressed through a stipulated number of tests with no TB detections.

The test employed throughout the campaign involves injecting tuberculin into the fold of skin on the underside of the animal's tail and checking three days later whether a lump has developed at the injection site. If any swelling is detected, the test is considered positive.

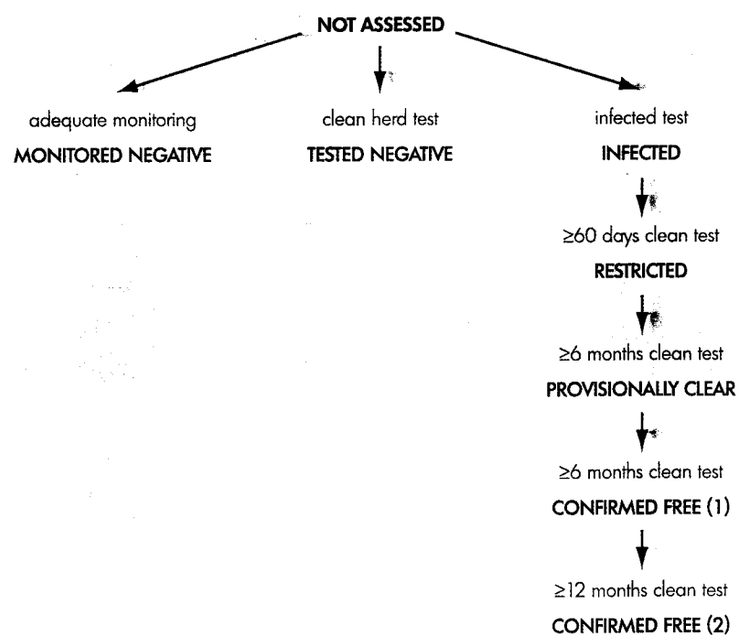
The procedure misses some infected cattle, making repeated testing necessary. Trials indicate that, under favourable conditions in southern Australia, more than 90% of tuberculous animals are likely to be detected. However, the success rate can fall to 70% or lower under the harsh conditions often experienced in central and northern Australia. The Commonwealth Scientific and Industrial Research Organisation (CSIRO) developed a blood test for TB—the gamma-interferon test—in the later stages of the campaign, and this was used in conjunction with the tuberculin test in some areas.

Techniques were developed during the campaign to facilitate progress in the centre and north, where vast distances, difficult terrain, extreme climatic conditions and low levels of cattle control posed major problems. A widely used approach involved segregating cattle by age, testing the young animals—those most likely to give an accurate response—and progressively destocking the older cattle. An 'approved program' for each station was drawn up by BTEC veterinary staff, and the owners aimed at eradicating TB as quickly as possible, while maintaining the economic viability of the station.

Herds had to be tested at least twice a year if progress was to be made towards eradication, and musters had to be complete to ensure no diseased cattle escaped testing. Meeting these conditions presented major challenges on many properties. Destocking was employed in situations where effective testing programs were not possible.

Destocking was also necessary in 'bush' areas where cattle—and in the Top End of the Northern Territory, buffalo—were not under any control. In many cases, shooting from helicopters was the only practicable means of removing the last animals. Towards the end of the campaign, 'radio-tracking' technology was used to help find these few, widely scattered cattle and buffalo.

Herd status and testing requirements



A further classification, *Suspect*, was applied when abattoir traceback suggested that a *Not Assessed, Monitored Negative, Tested Negative* or *Confirmed Free* herd might be infected. Testing was required. Depending on the result, the herd was then reclassified as 'tested negative' or 'confirmed free', or 'infected'.

National standards

Standard Definitions and Rules, first published in 1975 and updated as needs changed, set out minimum requirements for the conduct of the campaign as agreed by the Commonwealth, States and Territories. By helping ensure that effective eradication procedures were applied consistently across the nation, they made an important contribution to the success of the campaign.

The definitions covered, among other things, approved tests, and the disease status of areas and herds. The rules set out requirements for declaring areas provisionally free, impending free or free, restrictions on moving cattle between areas of different status, and standard test procedures.

Other sections of the Standard Definitions and Rules dealt with animal identification, requirements for approved eradication programs, procedures for dealing with TB detections in herds that had reached confirmed free status, and arrangements for TB monitoring by meat inspection and field testing.

The accompanying diagram shows how herds could progress in status through successive rounds of testing. Infected herds were tested at intervals of not less than 60 days until no further reactors were detected. Two further tests at least 6 months apart were then required for them to progress to confirmed free status.

To provide a higher level of certainty that TB was no longer present, in the later years of the campaign a further herd test was required after another year. In addition, a final monitor test had to be performed on cattle previously exposed to TB eight years after that exposure; alternatively, those cattle could be culled.

Declarations of area status—starting at *Control* and moving through *Eradication*, *Provisionally Free* and *Impending Free* to *Free*—required the State or Territory to show that the area had been adequately defined, the disease prevalence was known, and that appropriate monitoring and eradication activities were occurring.

Movement between areas and between herds within areas was restricted and strictly supervised. In some cases, cattle could be moved after testing; requirements were set out in the Standard Definitions and Rules.

Detecting the last infected animals

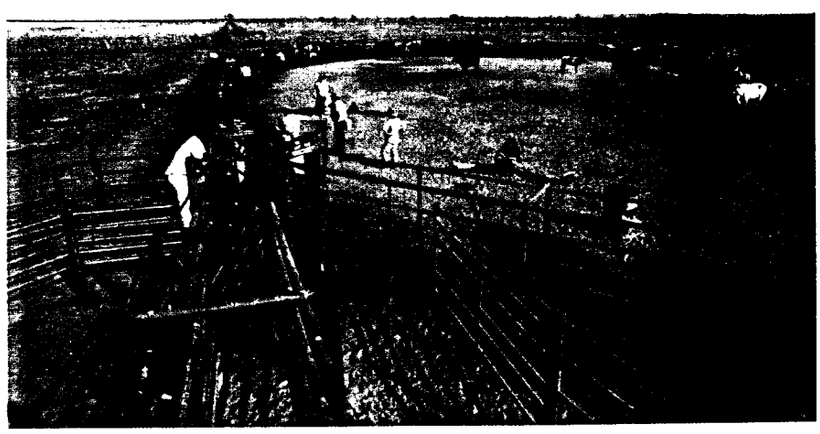
Maintaining an efficient abattoir monitoring system was crucial to the success of BTEC, and remains essential to TFAP. Most of the TB detections in confirmed free herds have been made through meat inspection, and abattoir monitoring will almost certainly be the means by which any TB still present in cattle or buffalo in Australia is found.

A National Granuloma Submission Program was established in 1992 to maximise the efficiency of the monitoring system. Its goals are to ensure that lesions that could indicate TB are detected at meat inspection and subjected to laboratory examination to provide a definitive answer on whether the disease is present. The successful operation of the program is reflected in a substantial rise during the 1990s in the rate of submission of lesions to laboratories. The Australian Reference Laboratory for Bovine Tuberculosis in Perth provides advice to other laboratories performing TB diagnoses and maintains a quality assurance program.

The continuing TB surveillance program also involves tuberculin testing of herds with a low rate of turnoff to abattoirs and those in which the risk of further TB cases appearing is considered greatest.

Campaign finances

Campaign funding has come from three sources—cattle industry levies, the Commonwealth Government, and State and Territory governments. Expenditure from the start of the campaign in 1970 to its conclusion in 1997, covering both brucellosis and TB, totalled about $840 million. Additional costs were borne by individual producers; these included spending on mustering cattle for testing and property improvements needed for campaign activities, and costs arising from the quarantine of properties or areas.



TB freedom according to the Standard Definitions and Rules

Definition of a free area

The area has been an Impending Free Area for at least 5 years during which period the number of breakdowns has been acceptable and effectively handled. All tuberculosis is believed to have been eradicated. Previously infected herds are subject to approved monitoring. An approved abattoir monitoring system and granuloma submission system are in place.

Rules for declaration of a free area, and their implementation

Australia may be declared a Free Area by the Standing Committee on Agriculture and Resource Management when:

Rules	Implementation
It has been an Impending Free Area for at least 5 years	National Impending Freedom was declared on 31 December 1992.
Veterinary Committee is satisfied that bovine tuberculosis has been eradicated from the area	Veterinary Committee concluded at its meeting on 22 October 1997 that this was the case.
All tuberculosis is believed to have been eradicated from the area	As above
No herds are Infected, Restricted or Provisionally Clear	No herds remain in any of these categories
Movement controls exist for previously infected herds with Confirmed Free 1 status	Store cattle from such herds undergo a movement test and must be held in isolation until completion of Confirmed Free 2 testing.
An approved abattoir monitoring system and granuloma submission system are in place.	These systems are in place and operating effectively.

Compensation based on the market value of comparable but healthy animals was provided to owners for cattle slaughtered following positive tests or compulsorily destocked.

Recognition that producers in central and northern Australia needed further help if the campaign was to proceed successfully, led to the introduction of a package of tax concessions in 1980. One measure encouraged the building of fences, yards and other structures needed for effective eradication programs in those regions. The others removed taxation disincentives to the use of destocking, followed by restocking with clean cattle, as an eradication strategy.

A range of additional assistance measures was introduced between 1984 and 1988. These included subsidies for mustering and holding cattle for testing, and a restocking freight rebate. Concessional loans for capital improvements and carry-on finance, and in some cases an interest subsidy, were made available.

Initially, half the funding for these measures was provided by the Commonwealth and the other half by the States. At that stage, responsibility for campaign operating expenses was divided 70:30 between the cattle industry and the States, while the Commonwealth provided 75% of compensation funds and the States the remainder.

From 1988, funds for all purposes were pooled, with industry providing 50%, the States 30% and the Commonwealth 20%. This allowed greater flexibility in campaign operations.

Key outcomes

The achievement of TB freedom enhances the competitive position of Australia's beef and dairy producers, further securing their reputation as suppliers of top quality product to domestic and world markets. Success against TB has also eliminated financial losses due to carcase condemnations.

An important spin-off has been a widespread improvements in cattle management on the stations of central and northern Australia, arising from campaign requirements. With more fencing, better cattle handling facilities, improved water provision and better mustering techniques, stations are operating more efficiently. This has increased the industry's capacity to take advantage of new opportunities such as the growing demand for live cattle exports, and to cope with price fluctuations and drought.

Produced by Arawang, Canberra, for the National Brucellosis and Tuberculosis Eradication Campaign Committee, Canberra, ACT. All photos provided by Kevin de Witte, Department of Primary Industry and Fisheries, Northern Territory Government.

ATTACHMENT IV

AQIS
AUSTRALIAN QUARANTINE AND INSPECTION SERVICE
DEPARTMENT OF PRIMARY INDUSTRIES AND ENERGY

T94/1660
3 April 1997

ANIMAL QUARANTINE POLICY MEMORANDUM 1997/23

Chief Veterinary Officers, all States and the NT
Director, Animal and Plant Health Branch, BRS
Chief, CSIRO Division of Animal Health
Principal VOs (Quarantine), all States, ACT & the NT
Manager, Animal Programs Section, AQIS Operations
Head, Foreign Diseases Unit, DPIE

Australian Livestock Exporters' Council
Quarantine and Animal Health Task Force, NFF
Australian Veterinary Association
National Meat Association of Australia
National Farmers' Federation
Australian Registered Cattle Breeders' Association

REVISED QUARANTINE REQUIREMENTS RELATING TO BOVINE BRUCELLOSIS AND TUBERCULOSIS

Requirements were finalised after consultation and circulated as AQPM 1996/22. However when incorporated in draft revised conditions for the importation of cattle from New Zealand AQPM 1996/43 on 13 August 1996 deficiencies became evident. Draft revised importation requirements were circulated as AQPM 1996/66 on 4 November 1996.

Concern was expressed by some respondents at the possible misinterpretation of the definition of a region - *part of the territory of a country* by the exporting country. To overcome this problem the definition from the OIE International Animal Health Code has been added as a footnote to both the brucellosis and tuberculosis requirements.

To remove ambiguity the phrase *The cattle originate from herds that were...* has been changed to *Immediately prior to export (introduction) the cattle resided in herds that were...*

No further amendments have been made to the brucellosis requirements but the following amendments have been made to the importation requirements relating to bovine tuberculosis:

- *for at least 2 years* has been added to the requirement that the cattle come from *officially free* herds. The cattle in an *officially free* herd have received at least 2 clean herd tests with a 6 month interval, the first being 6 months *following the eradication of bovine tuberculosis from the herd.* Depending on how this last phrase is interpreted this means that the herd is either equivalent to provisionally clear (PC) or confirmed free (CF1) under the BTEC Standard Definitions and Rules (SD&R). To maintain an *officially free* status a herd is required to give a clean result to an annual test. Therefore after a herd has been *officially free* for 2 years it will be at least equivalent to CF2 status according to the SD&R.

- Concern about the status of deer herds within the region have been addressed by adding *-and all cervine herds, in contact with cattle, have been* accredited free *of bovine tuberculosis for 2 years;*. The definition of accredited free as - *a cervine herd* accredited free *from bovine tuberculosis is one classified as free from bovine tuberculosis by the veterinary administration of the exporting country* has been added as a footnote.

- The regional freedom option *no case of bovine tuberculosis has occurred and all herds have remained* officially free *from bovine tuberculosis for 5 years* has been changed to *all bovine herds have remained* officially free *from bovine tuberculosis for at least 2 years and all cervine herds, in contact with cattle, have been* accredited free *from bovine tuberculosis for at least 2 years;* - this certification aligns the required period of time that the herd of origin had to be officially free with the first requirement, which also means that no cases of Tb had been detected for at least 3.5 years.

- The fifth double dot point under the second option stated that *99.8% of bovine herds have been officially free for the past 3 years and/or 99.9% of cattle have been in officially free herds for the past 6 years* has been aligned with the OIE Code by removing the */or* - this option was removed to overcome the problem created when 0.2 %, or less, of lower status herds contain a large percentage of the cattle in a region.

- To ensure that cattle introduced into the region are at least equivalent to CF2 status *originate from officially free herds,...* has been changed to *immediately prior to introduction, resided in herds which had been officially free for at least 2 years,...*

- To ensure that the test is applied in accordance with SD&R - *The tuberculin must be injected intradermally into the caudal fold which is examined 72 hours after injection when a positive test is indicated by any swelling, thickening or oedema of the injection site.* - has been added.

- To minimise the desensitising effects of the previous test the minimal time between the previous test and the movement tests has been extended from 60 days to 90 days.

- An alternative method of dealing with reactors to the after-import tuberculin test has been added. This option is only available with AQIS approval and allows for further testing, including the possible use of the comparative test, of valuable animals.

Thank you for your assistance with the development of these conditions.

DAVID WILSON
Acting Assistant Director
Animal Quarantine Policy Branch

Contact Officer: Geoff Ryan 'phone: (06) 272 5138 Facsimile:(06) 272 3399

cc Veterinary Counsellors, Australian Embassies, Washington and Brussels
Agricultural Counsellor, Australian Embassy, Tokyo
Counsellor (Economic), Australian Embassy, Seoul
Chief Veterinary Officer, MAF RA, NZ

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T94/542
24 March 1997

Importation requirements relating to bovine brucellosis in cattle

1 Immediately prior to export, the cattle resided in herds that were:
- *officially free** from bovine brucellosis, **and**
- in a country, or *part of the territory of a country***, in which bovine brucellosis is compulsorily notifiable and:
  - **either**
    no case of bovine brucellosis occurred, **and** all herds remained *officially free* from bovine brucellosis during the past five years;
    or
    the following requirements were met:
    - an official surveillance program is in place;
    - all reactors to tests for brucellosis are slaughtered and subjected to culture of appropriate tissues and lymph nodes for evidence of *Brucella abortus*;
    - all herds are assessed;
    - movement restrictions are placed on all infected herds;
    - compulsory eradication is practised and officially monitored;
    - less than 0.2% of herds are infected with bovine brucellosis;
    - no animal has been vaccinated against bovine brucellosis for at least the past 3 years, and
  - all animals introduced into the exporting country, or the *part of the territory of* the country:
    either
    immediately prior to introduction, resided in herds that qualified as *officially free* from bovine brucellosis,
    or
    have never been vaccinated and have been subjected to at least two approved tests with negative results at an interval of 30 days prior to entry to the herds (the tests are not valid in female animals which have calved during the 14 days prior to testing).

2 The cattle gave a negative result to a complement fixation test (CFT):
- within 30 days prior to export, and again
- within 30 days after import.

* an *officially free herd* is one which complies with OIE International Animal Health Code Article 3.2.1.1 - *Herd officially free* from bovine brucellosis (Attachment 1).

** *part of the territory of a country* is defined in the OIE International Animal Health Code as a *geographical or administrative entity possessing an authorised administrative veterinary organisation capable of taking and controlling the appropriate measures.*

T94/542
24 March 1997

Importation requirements relating to bovine tuberculosis in cattle

1 Immediately prior to export, the cattle resided in herds that were:
- *officially free** from bovine tuberculosis for at least 2 years, and
- in a country, or *part of the territory of a country***, in which bovine tuberculosis is compulsorily notifiable and:
  - either
    all bovine herds have remained *officially free* from bovine tuberculosis, for at least 2 years and all cervine herds, in contact with cattle, have been *accredited free**** from bovine tuberculosis for at least 2 years;
    or
    the following requirements can be met:
    - an official surveillance program is in place;
    - all bovine and cervine herds, in contact with cattle, are assessed;
    - movement restrictions are placed on all infected bovine and cervine herds;
    - compulsory eradication is practised and officially monitored;
    - 99.8% of bovine herds have been *officially free* for the past 3 years and 99.9% of cattle have been in *officially free* herds for the past 6 years;
    - all reactors and suspect cases are investigated by the Veterinary Administration which has the capacity to confirm diagnosis by microscopic-biological and/or cultural examination, and
  - cattle introduced into the country, or the *part of the territory of the country*:
    - immediately prior to introduction, resided in herds which had been *officially free* for at least 2 years, and
    - gave a negative result to an approved tuberculin test prior to entry.

2 The cattle gave a negative result to an approved single intradermal tuberculin test (using 0.1ml of Purified Protein Derivative [PPD] Tuberculin containing 3mg PPD per ml) within the 30 day period immediately prior to export and again within 90 days immediately after import. The tuberculin must be injected intradermally into the caudal fold which is examined 72 hours after injection when a positive test is indicated by any swelling, thickening or oedema of the injection site. The tests must be conducted not less than 90 days following any previous tuberculin test.

3 Reactors to the tests for bovine tuberculosis must be:
either
slaughtered and subjected to a detailed autopsy with histopathology and culture of lymph nodes.
- If *Mycobacterium bovis* is detected, no in-contact cattle may be imported, or released from quarantine in Australia;
- If *Mycobacterium bovis* is not detected, in-contact cattle must be retested a minimum of 90 days after the last test, with negative results, before they can be imported or released from quarantine in Australia.

or (for the after-import test only, with AQIS approval)
isolated from other cattle in the consignment (which remain in quarantine) and, after an interval of at least 90 days, subjected to further testing.

[*Note: This further testing could include a comparative test using bovine and avian tuberculin. This testing would be applied and interpreted under direction from AQIS. The fate of the retested and in-contact cattle would be determined by AQIS.*]

* an *officially free herd* is one which complies with OIE International Animal Health Code Article 3.2.3.1. - *Herd officially free* from bovine tuberculosis (Attachment 1).

** *part of the territory of a country* is defined in the OIE International Animal Health Code as a *geographical or administrative entity possessing an authorised administrative veterinary organisation capable of taking and controlling the appropriate measures.*

*** a cervine herd *accredited free* from bovine tuberculosis is one classified as free from bovine tuberculosis by the veterinary administration of the exporting country.

ATTACHMENT 1

Animal Health Code Article 3.2.1.1. BOVINE BRUCELLOSIS

Herd officially free from bovine brucellosis

To qualify as officially free from bovine brucellosis, a herd of cattle shall satisfy the following requirements;

1) be under official veterinary control;
2) contain no animal which has been vaccinated against bovine brucellosis during at least the past three years;
3) only contain animals which have not showed evidence of bovine brucellosis infection during the past six months, all suspect *cases* (such as animals which have prematurely calved) having been subjected to the necessary laboratory investigations;
4) all cattle over the age of one year (except castrated males) were subjected to serological tests with negative results performed twice at an interval of 12 months. The requirement is maintained even if the entire herd is normally tested every year or testing is conducted in accordance with other requirements established by the *Veterinary Administration* of the country concerned;
5) additions to the herd shall only come from herds officially free from bovine brucellosis. This condition may be waived for animals which have not been vaccinated, come from a herd free from Bovine brucellosis, provided negative results were shown following a buffered *Brucella* antigen test and the complement fixation test during the 30 days prior to entry into the herd. Any recently calved or calving animal should be retested after 14 days, as tests are not considered valid in female animals which have calved during the past 14 days.

Animal Health Code Article 3.2.3.1 BOVINE TUBERCULOSIS

Herd officially free from bovine tuberculosis

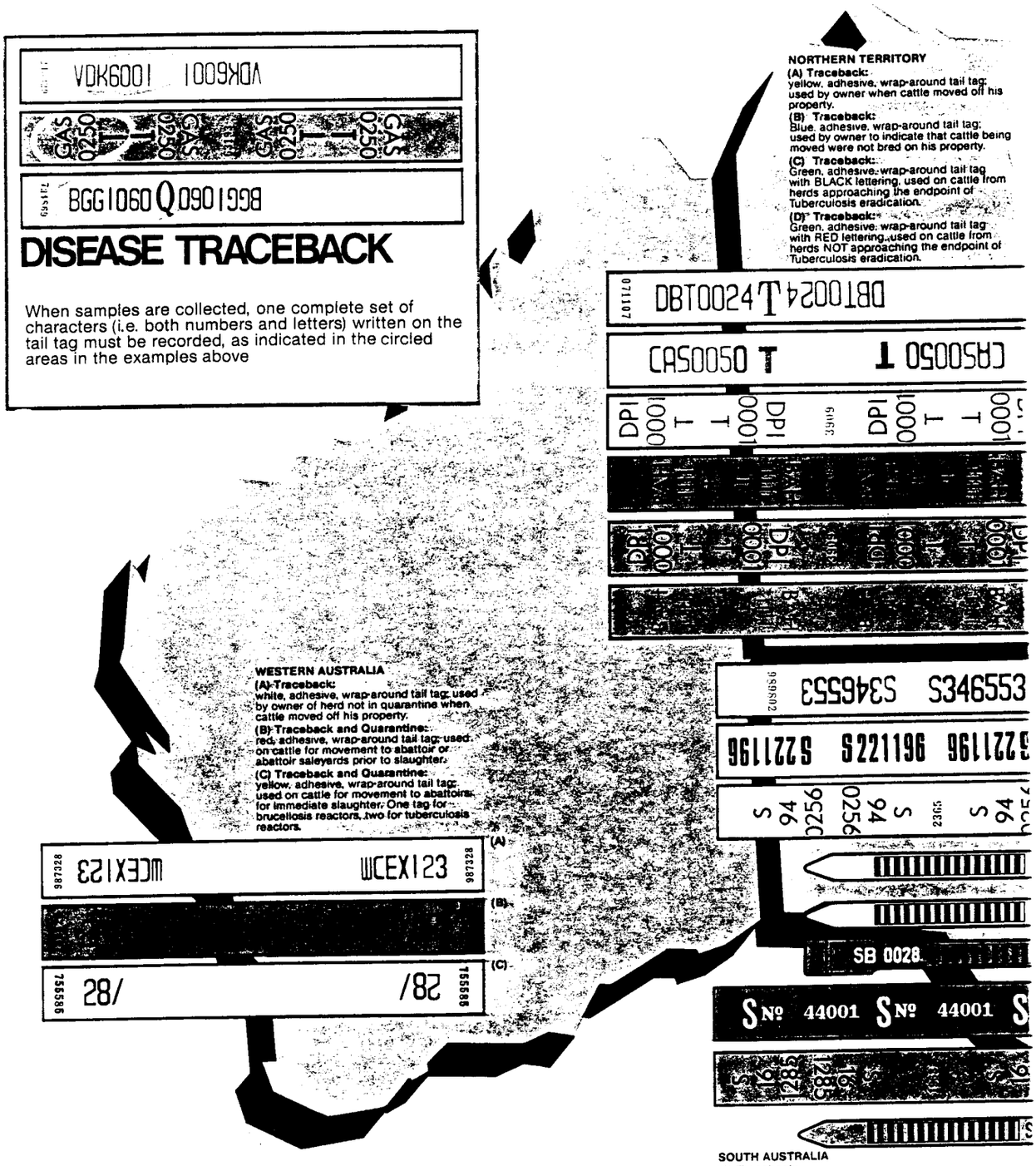
To qualify as officially free from bovine tuberculosis, a herd of cattle shall satisfy the following requirements:

a) the herd is in a country of part of the territory of a country officially free from bovine tuberculosis; or
b) all cattle in the herd:
    1) show no clinical sign of bovine tuberculosis;
    2) over six weeks of age, have shown a negative result to at least two official tuberculin tests carried out at an interval of six months, the first test being at six months following the eradication of bovine tuberculosis from the herd;
    3) showed a negative result to an annual tuberculin test to ensure the continuing absence of bovine tuberculosis;
c) cattle introduced into the herd:
    1) have been certified by an Official Veterinarian as having shown a negative result to the tuberculin test during the 30 days prior to entry into the herd; and /or
    2) were kept in a herd officially free from bovine tuberculosis.

ATTACHMENT V

CATTLE IDE

TAIL TAGS USI



AUSTRALIA

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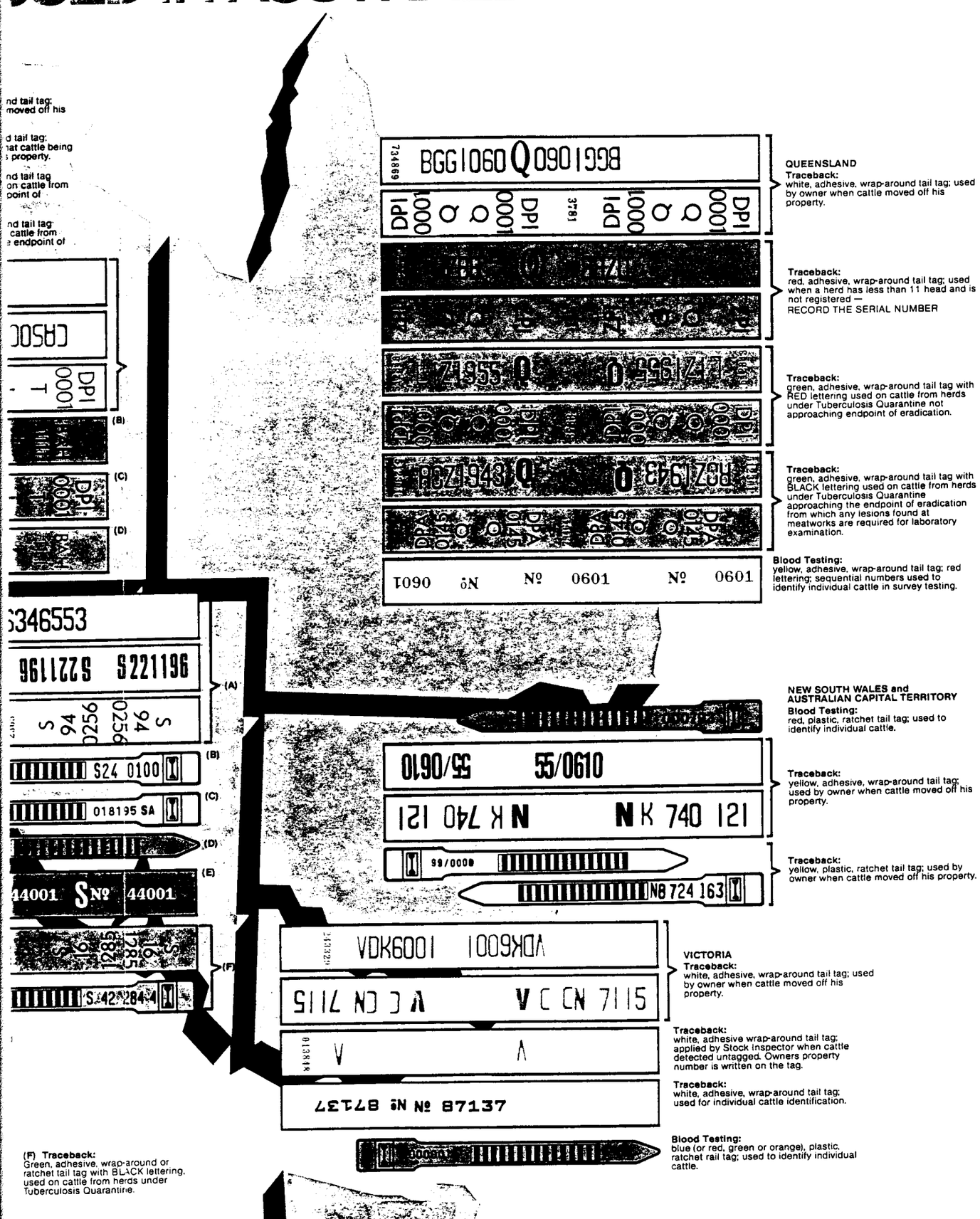
DENTIFICATION
USED IN AUSTRALIA



QUEENSLAND
Traceback:
white, adhesive, wrap-around tail tag; used by owner when cattle moved off his property.

Traceback:
red, adhesive, wrap-around tail tag; used when a herd has less than 11 head and is not registered —
RECORD THE SERIAL NUMBER

Traceback:
green, adhesive, wrap-around tail tag with RED lettering used on cattle from herds under Tuberculosis Quarantine not approaching endpoint of eradication.

Traceback:
green, adhesive, wrap-around tail tag with BLACK lettering used on cattle from herds under Tuberculosis Quarantine approaching the endpoint of eradication from which any lesions found at meatworks are required for laboratory examination.

Blood Testing:
yellow, adhesive, wrap-around tail tag; red lettering; sequential numbers used to identify individual cattle in survey testing.

NEW SOUTH WALES and AUSTRALIAN CAPITAL TERRITORY
Blood Testing:
red, plastic, ratchet tail tag; used to identify individual cattle.

Traceback:
yellow, adhesive, wrap-around tail tag; used by owner when cattle moved off his property.

Traceback:
yellow, plastic, ratchet tail tag; used by owner when cattle moved off his property.

VICTORIA
Traceback:
white, adhesive, wrap-around tail tag; used by owner when cattle moved off his property.

Traceback:
white, adhesive wrap-around tail tag; applied by Stock Inspector when cattle detected untagged. Owners property number is written on the tag.

Traceback:
white, adhesive, wrap-around tail tag; used for individual cattle identification.

Blood Testing:
blue (or red, green or orange), plastic, ratchet rail tag; used to identify individual cattle.

(F) Traceback:
Green, adhesive, wrap-around or ratchet tail tag with BLACK lettering, used on cattle from herds under Tuberculosis Quarantine.